# Should We Be Scared of Artificial Intelligence?

**Dila Ram Bhandari**

Faculty of Statistics, Nepal Commerce Campus, Tribhuvan University

**Dr. Uma Shrivastava**

Professor, Deen Dayal Upadhya Gorakhpur, University, India

## Abstract

*The field of Artificial Intelligence is enhancing rapidly which breakthroughs in image and speech recognition, autonomous robotics, language tasks, and game playing.AI is the part of human daily lives with knowing or unknowingly and there is no privacy because of social media and technology which is progressing rapidly from Sirito Tesla hands-free switch for highway and freeway self-driving car.The application AI in numerousranges, from online services to business, education and healthcare.It is used mostly by organizations to advance their techniquecompetences, automate resource-heavy tasks, and to make business forecasts based on big data rather than automaticmeans. Our routinetransformed physical to virtual in banking, medical, education, marketing and others. It makes all process enhanced, faster, and supplementaryperfect and has some extremelydecisivefunctions too such as recognizing and foretelling fraudulent transactions, faster andcredit scoring with automating manually intense data management practices. The fundamental goal of AI is to empowermachines and computers to perform philosopher tasks for problem solving, decision making, awareness, and feeling human interaction.It is making inroads is self-learning solutions so it is gaining popularity due to its use of personalized learning, pace, and suggestions.Beyondinnovative and powerful AI systems will be developed and deployed in the future, which could be transformative with negative as well as positive consequences also threats.*

*Keywords: Artificial intelligence, Machine learning, computer*

## Introduction

Artificial intelligence has the prospective to contributeinstitutions in dealing with cybersecurity and cybercrime encounters more efficiently and cost-effectively. Speedyrevolutions in the field of AIhave keeneffects for the economy, environmentand society at large which is a computing concept that helps a machine think and solve complex problems with errorless and perfectly. Siri was announced as a digital assistant by Apple which was developed by Elon Musk and some others founded OpenAI in 2015.These revolutions have the prospective to truthfullyeffect both the production and the features of a wide range of products and services, with significantassociations for productivity,service sectors and employment. AIand principally Machine Learning (ML) techniques have been playing an ever-increasing role in managingbig data sets and generating insight and technicalfunctions. AI is an intelligence machine whose excellencebasically depends on its supremacywithcompetence to identify, detect, procedure and memorizesignificant variables from an environment which is the part of the statistical and machine learning

that AI uses to mimic human intelligence. Its usages are in speechdetection, language transfer, computer visualization and neural networks and others which are the building blocks of the robotic mind.

AI has the ability of a digital and computer-controlled robot to undertake tasks mostlylinked with intelligent beings.AI systems are power-driven by machine learning, powered by deep learning, and it has paved its way into various industries, be it gaming, or health care and is universally. The application of AI is facial recognition feature on mobiles, Google Maps, junk e-mail filters, Voice-to-text features, search references, fraud security and blockage, ride-sharing functions like pathao etc.AI is the ease in human error, provides digital assistance and faster and more precise decisions but dearth of genius and lack of genuine products.

## Objectives of Study

The objective of this paper is to studyabout Importance of AI,itsDomain, Application of AP in real life, demeritsand future of AI.

## Literature Review

AI goals to provide the abilities of perception, cognition, and decision-making for machines. Recently, new research and applications in information science are emerging at an unprecedented rate, which is inseparable from the support by the AI infrastructure.

Artificial Intelligence is like nuclear energy 'both promising and dangerous. The power of AI is "so incredible, it will change society in some very deep ways." (Gates, 2019).Worth reading Superintelligence by Boston. We need to be super careful with AI. Potentially more dangerous than nukes." (Elon Musk, 2019)."The development of full artificial intelligence could spell the end of the human race." (Stephen Hawking, 2018).

## History of Artificial Intelligence

The foundation of contemporary AI research can be traced back to John McCarthy, who created the term AI,during at a seminar at Dartmouth College in 1956 which is birth of AI in scientific arena.

**2006**: Companies like Facebook, Google, Twitter, Netflix started using AI.

**2008**: Google made a breakthrough in speech detection and introduced the speech recognition feature in the iPhone.

**2011**: Watson an IBM computer, won Jeopardy in 2011, a game show in which it had to solve complicated questions and riddlesand solve complex problems fast.

**2014**: Google made the first self-driving car which passed the driving test.

**2014**: Amazon's Alexa was released.

**2016**: Hanson Robotics created the first "robot citizen," Sophia, a humanoid robot capable of facial recognition, verbal conversation, and facial emotion.

**2020**: During the SARS-CoV-2 pandemic, Baidu made its LinearFold AI algorithm available to scientific and medical teams seeking to create a vaccine. The system could anticipate the virus's RNA succession in just 27 seconds, which was 120 times faster than previous one.

## The Domain of AI and its Application

**Machine Learning (ML):** Itis a machine which helps for inferences and decisions based on previouspractice and identifies patterns, analyses without having to involve human involvement for businesses and supports them make a better decision.

**Deep Learning (DL):** It helps a machine to process inputs through sheets in order to sort, infer and forecast the result.

**Neural Networks (NN):** It works on analogous principles to Human Neural cells which is a sequence of algorithms that captures the correlation between numerous variables and procedures the data as a human

brain does.

**Natural Language Processing (NLP):** Once a machine grasps what the user intends to communicate, it responds consequently by reading, understanding, and inferringa language by a machine. Similarly, Computer vision algorithms assists the machine categorize and understand from a set of images, to make a better result based on formerthoughts.

AI is used in distinctive domains to give understandings into user performances and providesanctionsfounded on the given information. Google's projecting search algorithm used historical user statistics to forecast what a user would brandafter in the search bar. Netflix uses chronological user information to reference what movie a user could want to see next, making the user habituatedagainst the platform and increase watch time. Similarly, Facebook uses historical data of the users to roboticallyassists to tag the friends, based on their facial features in their pictures. AI is used universally by institutes to construct an end user's lifespaneasier and it would be mostly fall under the data processing classification as following:

## AI Learning Process
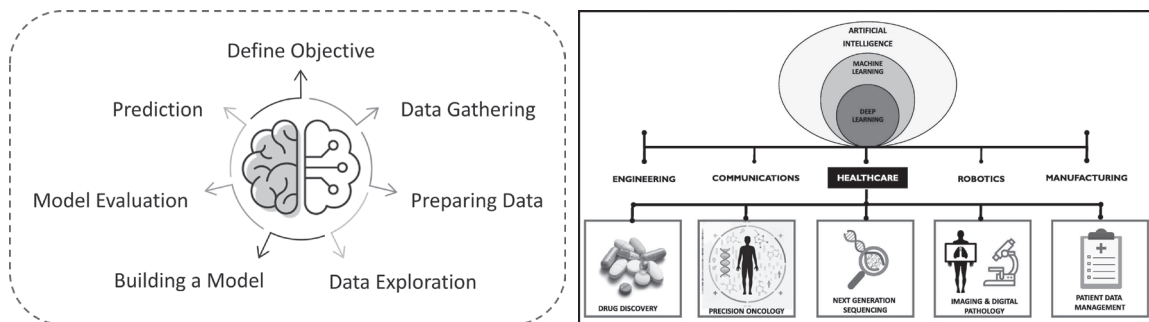


- ▪ **Online shopping:** Artificial intelligence is used in online shopping with providing personalized references to users, based on their forgoing searches and consumptions.
- ▪ **Digital personal assistants:** Smartphones use AI to specify personalized facilities. Itsupporters can solutionqueries and assistanceoperators to organize their regularhabitsdeprived of a annoyance.
- ▪ **Machine translations:** AI-based language conversion software deliversconversions, subtitling and language detection which can support users to recognize other languages.
- ▪ **Cybersecurity:** AI systems recognize and fight cyberattacks based on identifying patterns and backpedaling the outbreaks.
- ▪ **AIbesidepandemic:** In Covid-19 pandemic, AI has been used in recognizing epidemics, managing health careentitlements, and tracking the spread of the disease.

Except these activities, the application of AI in education, business, manufacturing, banking, transportation, security, gaming, agriculture, health care, space exploration, social media and others.

## Artificial Intelligence Careers in the World

The AI listed businesses in world are significantly popular in the AI job market are: Apple, Google, Amazon, Facebook, Accenture, IBM, Microsoft, Baker Hughes, PepsiCo, Casetext and others.It makes public's lives simpler because it can automate work by its huge data crunching power which even exceeds human intellectualability. It does not have fatigue, boredom/human emotions to deal with thoughtful make them very efficient and effective. The application of AI in modern medicine industry for robotic diagnostics, medical decision making, computerized surgery and prediction and it can be also used in power networks and electrical industries to predict numerous power related issues such as power outage depending on past hurricane data, fault recognition and wind power forecast for power generation depending on wind speed,

among other things. Similarly, the application AI as Google Maps, ride-sharing functions (e.g.: Pathao, Uber), and itautopilot in Businessflights, Spam filters on E-mails, plagiarism inspectors and tools, facial recognition, search references, Voice-to-text features, smart assistants (e.g.:Siri, Alexa), fraud recognition and stoppage, self-driving cars, Netflix's references and others.
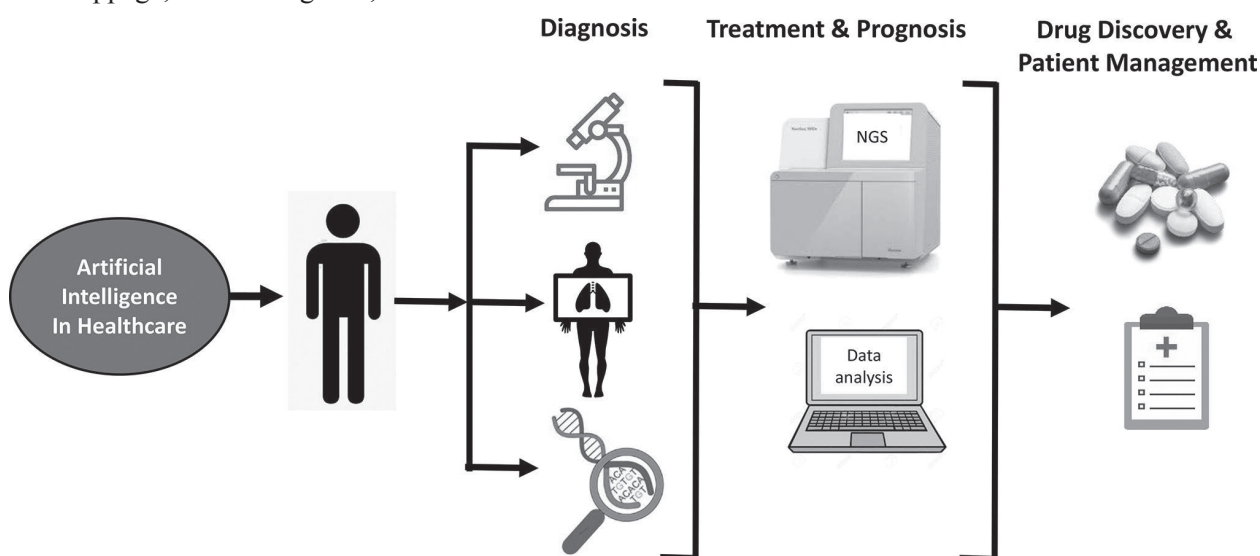


## Future of Artificial Intelligence

AI is assisting our world in various parts and at last promoting humankind.We are previously socially and expressively isolated by being glued to digital devices, sometimescompletelyuninformed of human diaspora around the world. With the initiation of expressively acting robots, human beings become more distant and this will increase human apathy across societies and regions causing a death and slowdown in human centric policies. Institutes across the world are coming up with breakthrough revolutions in AI and machine learning. It is not only touching the forthcoming of eachbusiness and eachhumanoid being but has also acted as the main driver of emergentskills like big data, robotics and IoT. As AI continue to grow, it will have more and more impact on the social setting and quality of life and danger interms of labour, and overall economic activity on the earth and AI will harms. The fears of AI appearin anxiety about device intelligence,mass redundancy, super-intelligence, wrong people's hands, and common concern and caution when it derives to novel technology.

China has announced a countrywide AI development plan in 2017, intended to support make the country the world leader in AI by 2030 and build a national AI business worth $150 billion. The UAE also has an AI strategy, that goals to support the development of AI solutions for several vital sectors such as transportation, healthcare, space investigation, smart utilization, water, technology, education, and farming in the country. The country has even appointed a state minister for AI to work on 'making the UAE the world's best equipped for AI and other innovative technologies.In 2018, France and Germany were among the countries that followed this tendency of launching countrywide AI growthpolicies.
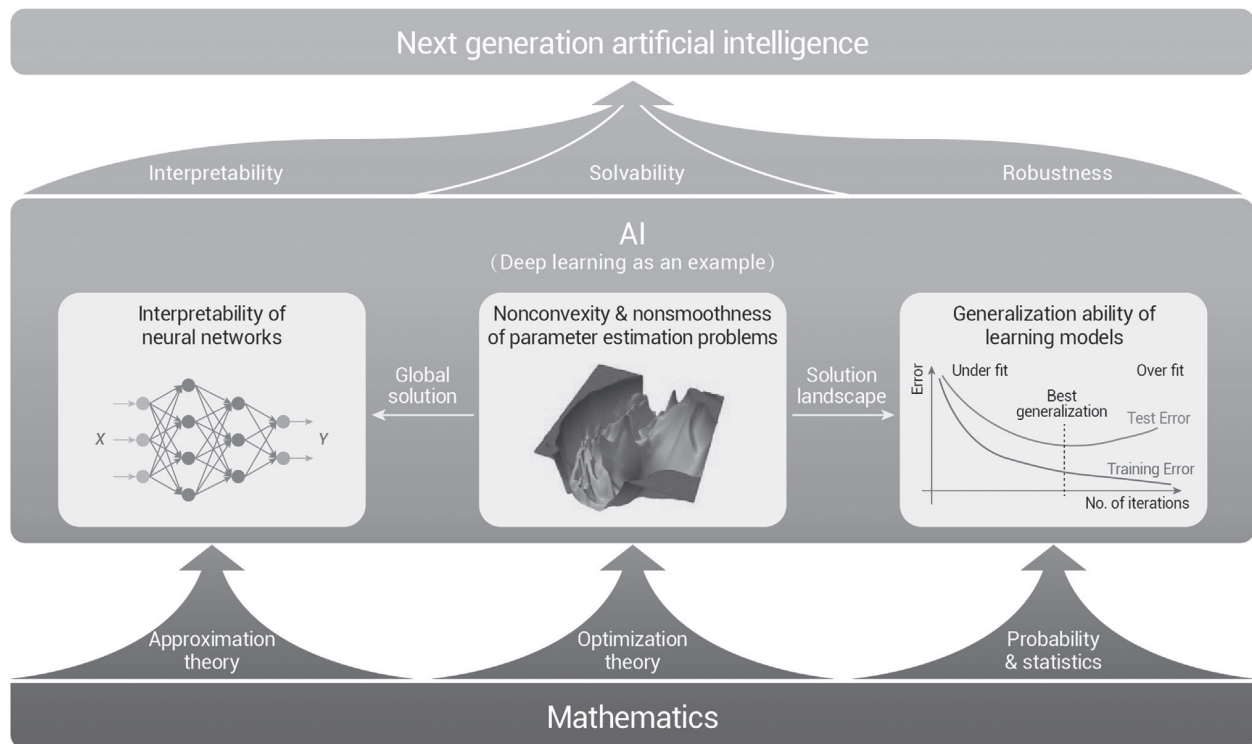
## Application of Artificial Intelligence

### AI for Education

Global Market Insights Inc. predicts that the AI education market could have a market value of $20 billion by 2027. The industry growth is good news, as AI can ultimately reduce the burden on teachers across the globe.AI is changing the teaching-learning process in education in and after COVID-19 pandemic. Paradigm shift in teaching strategies transformation will be majorly attributed to the continued intervention of technology in the world. The connection between educators and students is dynamical, wherever educators became additional approachable and far higher at understanding their students 'views and technology has created learning additional cooperative, as academics and students square measure operating in bicycle-built-for-two to realize higher outcomes.

How technology is used in classrooms has changed significantly in response to COVID-19. Rather than teaching in front of a classroom full of students, lockdowns forced many educators across the globe to teach remotely, from their homes. Edtech company Promethean surveyed teachers and learned that 86 percent thought AI should be an important part of education."Microsoft and McKinsey's report of over 2,000 students and 2,000 teachers from Canada, Singapore, the UK, and America shows that AI is previouslydelivering teachers and schools with novelmethods to understand how their students are improving, as well as granting for a fast, personalized, targeted period of content."There are diverse arenas where AI has concerned on:

### AI for Banking

Every day, huge quantities of digital transactions take place as users pay bills, withdraw money, deposit checks, and do a lot more via apps or online accounts. Thus, there is an increasing need for the banking sector to ramp up its cybersecurity and fraud detection efforts. many banks are still too confined to the use of credit history, credit scores, and customer references to determine the creditworthiness of an individual or company. AI has taken the banking industry by storm with its offerings and services to detect fraud of credit cards, detect anomalies and provide customer assist via Electronic Virtual Assistant and it keep

a view on past data patterns and predict future insights of the data.AI can help banks improve the security of online finance, track the loopholes in their systems, and minimize risks. AI along with machine learning can easily identify fraudulent activities and alert customers as well as banks.The system also automated a lot of crucial decisions while routing some cases to human analysts for further inspection.External global factors such as currency fluctuations, natural disasters, or political unrest have serious impacts on banking and financial industries. During such volatile times, it's crucial to take business decisions extra cautiously. AI also helps find risky applications by evaluating the probability of a client failing to pay back a loan. It predicts this future behavior by analyzing past behavioral patterns and smartphone data.

**AI for health care**

AI in medicine and health care is a rapidly growing field with enormous potential. TS in the health care system could occur in the near future, depending on the pace of technological and computational growth. There is the possibility that AI could be a substitute for human doctors for many medical activities; however, such a replacement will not be absolute. Human doctors will continue serving patients with capabilities augmented by AI. As it evolves, clearer guidelines will emerge on its integration with medical practice. AI in health care will need a substantial component of AE to truly achieve singularity. All AI-enabled services or devices in health care, no matter how advanced, will always be guided by the core principles of humanity and patient-centered care.AI is already being applied successfully in several educational instances and improves learning and student development, as well as educators' performance.AI uses complex algorithms to detects and emulate complex humancircumstances and provide medication in advance.

Similarly, AI plays vital role in marketing forCustomer data is been used with the assist of ML to forecast a person'sactivities and helps for easy segmentation for the dealers. It helps farmers for the better yield of their crops and also to protect them from weeds and other natural disasters. AI is the broad notion in video gamesand the game includes the elements that define the actual challenges players face and the problems they have to solve, such as rules and objectives.AI and ML is the greatest way to handle and process data in this scale. AI System gathers data from the vehicles radar, cameras, GPS, and cloud assistances to createswitch signals that operate the vehicle. Virtual Assistance are widely used in every house today, such as Siri, Alexa and otherswhich can be used to control devices in house, Book Cabs, Order Food etc. Artificial Creativity such as Social Platforms like Facebook and it uses ML and Deep Learning algorithm techniques for Face detections and Automatic Tagging, design feed based on our interest, detect hate speech and Negative Content.

The World Economic Forum estimates that, by 2025, a large proportion of companies will have adopted technologies such as ML. It strongly encourages governments and educational institutions to focus on rapidly increasing related education and skills, focusing on both STEM and non-cognitive soft skills to meet the impending need. Advances in technology will cause major disruptions in the workforce, as automation could replace up to 50 percent of existing jobs in the U.S. alone.

| 1 | Cybersecurity and fraud detection | 6 | Customer experience |
| 2 | Chatbots | 7 | Risk management |
| 3 | Loan and credit decisions | 8 | Regulatory compliance |
| 4 | Tracking market trends | 9 | Predictive analytics |
| 5 | Data collection and analysis | 10 | Process automation |

So, should we be scared of AI at all? Our doubts are not unproven, but as we have seen, there are plentiful measures being put in place to protect us and our future. So long as governments and international organizations continue to work concerning enacting policy that both protects us and encourages more diversity in the field, then we may be on track for AI to be a productiveaccumulate to society.

## Conclusion

The rising trend in practicalrevolution has continually been present. Apart from savings, AI and other emergingknowledges are also announcing new potentials. Novel businesses and prospects are being created as a result of these potentials. The applications of AI have touched every movementeverywhere the world, and as a result, many firms are investing in AI development and operate.  AI will disturb the job industry tremendously because unlike formermechanisms of human antiquity.It's vast data administering power without the genetic fatigue, feeling and stoppage like people, makes it even more creative and well-organized than human beings in decision making and estimates. It is used across businesses globally and some of the industries which have delved deep in the field of AI to find new functions are E-commerce, Retail, Security and Surveillance. AI has been shown to amplify bias against certain races and genders due to algorithms being built on data reflecting societal biases.It may malfunction, may be hacked into resulting in a totally volatile new behavior. Such may have huge significances in the healthcare business, military industrial complex and warfare. AI will enhance global human apathy and inequality will create more gap between the rich and the poor and make the weaker nations more exploitable.

## References

AI dangers: imagined and real: Communications of the ACM: 60(2). (2020). Retrieved

AIR5: Five Pillars of Artificial Intelligence Research - *IEEE Journals & Magazine*. (2020).

An Artificial intelligence-based software application for micro calcification detection on mammogram images - *IEEE Conference Publication*. (2020). Retrieved 22 March 2020, from https://ieeexplore.ieee.org/document/7496154/metrics#metrics

Application of Artificial Intelligence in Construction Waste Management - IEEE Conference document/8710680

Applications of artificial intelligence in power electronics - IEEE Conference Publication. https://www.supplychaintoday.com/artificial-intelligence-quotes-bill-gates-elon-musk-stephen-hawking/

Panesar, S., Kliot, M., Parrish, R., Fernandez-Miranda, J., Cagle, Y., & Britz, G. (2020). *Promises and Perils of Artificial Intelligence in Neurosurgery*.

Qashqai, P., Vahedi, H. and Al-Haddad, K. (2019). Applications of artificial intelligence in power electronics. [online] IEEE Xplore. Available at: https://ieeexplore.ieee.org/ document/8781216

The role of AI in China's crackdown on Uighurs. (2020). Retrieved 23 March 2020, from https://www.ft.com/content/e47b33ce-1add-11ea-97df-cc63de1d73f4

https://www.supplychaintoday.com/artificial-intelligence-quotes-bill-gates-elon-musk-stephen-hawking.

22 March 2020, from https://dl.acm.org/doi/abs/10.1145/2953876

Retrieved 22 March 2020, from https://ieeexplore.ieee.org/document/8782800

Publication. (2020). Retrieved 22 March 2020, from https://ieeexplore.ieee.org/

Retrieved 22 March 2020, from https://ieeexplore.ieee.org/document/8781216